

What is claimed is:

1. A pharmaceutical composition comprising a safe and efficient amount of osteogenic growth peptide or OGP, a safe and efficient amount of granulocyte colony-stimulating factor or G-CSF and a pharmaceutically acceptable carrier, wherein the molar ratio of OGP to G-CSF is from 0.25: 1 to 100: 1.

2. The pharmaceutical composition of Claim 1 further comprising a component selected from the group consisting of GM-CSF, EPO, IL-2, or the combination thereof.

3. The pharmaceutical composition of Claim 1 wherein the OGP is selected from the group consisting of human OGP, OGP-related peptide, their pharmaceutically acceptable salts, and the combination thereof.

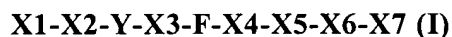
4. The pharmaceutical composition of Claim 1, wherein the molar ratio of OGP to G-CSF is from 1: 1 to 20:1.

5. The pharmaceutical composition of Claim 1, wherein the safe and efficient amount of OGP is 0.1ug-100mg per kg body weight, and the safe and efficient amount of G-CSF is 0.1-1000ug/kg body weight.

6. The pharmaceutical composition of Claim 1, wherein the formulation of the pharmaceutical composition is injection, or lyophilized powder.

7. The pharmaceutical composition of Claim 3, wherein the human OGP has the amino acid sequence of ALKRQGRTLYGFGG; and

the OGP-related peptide is derived from the C terminal of OGP and has the amino acid sequence of formula (I):



wherein X1 is amino, acetyl, acetylated amino acid or deaminated amino acid; each of X2 and X6 is independently none or a single amino acid, or is several amino acids or a peptide; each of X3, X4, and X5 is independently an amino acid; X7 is amino, carboxyl or hydroxyl, wherein the amino acid for X1-X6 is selected from the group consisting of Gly, Ala, Asp, Glu, Asn, Gln, Ser, Thr, Leu, Ile, Lys, Arg, Phe, Tyr, Trp, Pro, Cys, Met, His, Val;

Y is Tyr, F is Phe, and the length of OGP-related peptide is 5-15 amino acids.

8. A method for preparing a pharmaceutical composition, comprising the following steps:

mixing the OGP, G-CSF and a pharmaceutically acceptable carrier, thereby obtaining the pharmaceutical composition, wherein the molar ratio of OGP to G-CSF is from 0.25: 1 to 100: 1.

9. The method of Claim 8 wherein the molar ratio of OGP to G-CSF is from 1: 1 to 20:1.

10. The method of Claim 8 wherein the formulation of the pharmaceutical composition is injection, or lyophilized powder.